

REMARKS

Claims 1-10 are all the claims pending in the application.

Summary of the Office Action

The abstract is objected to because of various informalities.

The title has been found to be non-descriptive.

Claims 1-10 are objected to because of various informalities.

Claims 3, 4, and 6-9 are rejected under 35 U.S.C. § 112, second paragraph.

Claims 1-5 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by “Using the SNAP Development Environment” by Template Software [hereinafter “SNAP”].

Claims 6, 8, and 9 are rejected under 35 U.S.C. § 103(a) being unpatentable over SNAP as applied to claim 5 above, and further in view of Carter (US 5,907,705).

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of SNAP and Carter as applied to claim 6 above, and further in view of “Linkers & Loaders” by Levine.

The Applicants traverse the rejections and request reconsideration.

The present invention provides a programming device having a group of program generation tools to generate programs for each of a plurality of devices. The plurality of devices form part of a control system for controlling a group of machines. A data sharing unit is adapted to share a variable name and attribute data definitions corresponding to an object of each of said plurality of devices for a program generation. The objects are also shared by said program generation tools.

Objections to the Specification

The Applicants respectfully provide a revised Abstract and Title to overcome the objections raised by the Examiner.

Claim Objections and Rejections under section 112

The Applicants respectfully amend the claims to place them in an acceptable form under US practice. The current presentation of the claims are believed to overcome the grounds for the objection of the claims and their rejection under section 112.

Prior Art Rejections

Rejection of claims 1-5 and 10 under section 102(b) based on SNAP

The independent claims 1, 5 and 10 (as amended) are devoted to a programming device and method for a set of program generation tools for a group of devices that are part of a control system for controlling a group of machines.

SNAP is simply an environment for program development for writing object-oriented programs in higher level languages. However, there is no disclosure in SNAP for any control system or a group of devices that form part of a control system for controlling a group of machines. The Examiner refers to Figs. 3-3 on page 3-14 in alleged support of his contention that SNAP discloses a control system. However Fig. 3-3 merely shows an object model editor workspace.

SNAP can be used to create object-oriented application programs. However, it is believed that it does not include a group of program generation tools for writing programs for a group of external devices that are part of a control system.

To anticipate a claim, the cited reference must disclose each of the elements and their associated limitations in the claim. The Applicants respectfully submit that independent claims 1, 5 and 10 are not anticipated by SNAP at least because of the above reasons.

Claims 2-4 are dependant on claim 1 and are patentable at least for the same reasons for which claim 1 is patentable.

Rejection of claims 6, 8 and 9 under 103(a) based on SNAP and Carter.

Claims 6-9 are dependant on claim 5 and therefore are allowable at least by virtue of its dependence. Further, Carter does not overcome the deficiency noted above in relation to SNAP. In addition, the Examiner incorrectly alleges that 4:55-59 of Carter discloses that changes to objects are notified to the device where the object originally resides. It is believed that Carter does not disclose an object-oriented system at all.

Carter arguably suggests keeping track of and integrating changes to programs. However, there is no suggestion regarding changes made to objects. Integrating changes to programs is believed to be completely different from notification of changes to objects that are used in a control system.

Rejection of claim 7 under 103(a) based on SNAP, Carter and Levine

Claim 7 is dependant on claim 5 and therefore is allowable at least by virtue of its dependence. Further, Levine does not overcome the deficiencies noted above in the teachings of SNAP and Carter. Specifically, Levine provides a general discussion of linking and loading as it relates to compiling of object oriented programs. However, there are no suggestions related to objects that belong to devices in a control system for controlling a group of machines.

Amendment under 37 C.F.R. § 1.111
U.S. Application No.: 09/936,160

Attorney Docket No.: Q65858

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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